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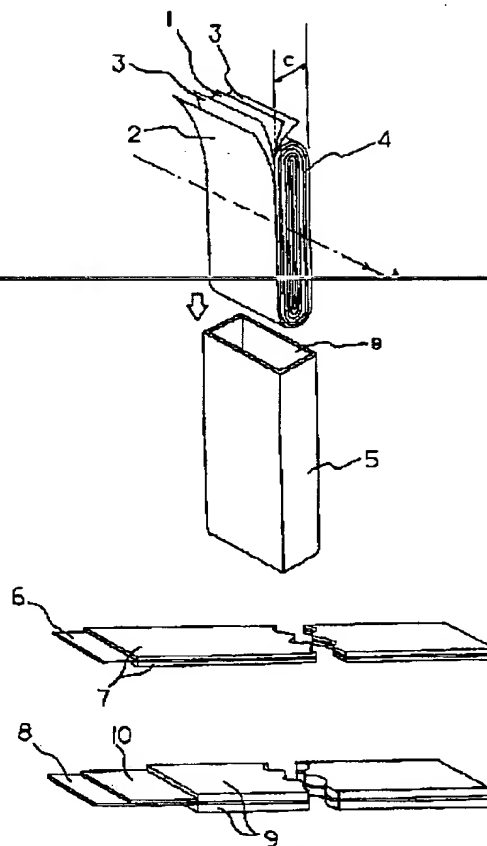
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APPLICANT : JAPAN STORAGE BATTERY CO LTD;

INVENTOR : TORIYAMA JUNICHI;

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TITLE : RECTANGULAR CYLINDRICAL
BATTERY



ABSTRACT : PURPOSE: To reduce the friction resistance between a peripheral part of a spiral electrode group and the inner surface of a battery case, and to facilitate the insertion of the electrode group, and to prevent the generation of breakdown of the peripheral part of the electrode group and winding break of the electrode group itself by forming a graphite layer in the peripheral part of the wound electrode group.

CONSTITUTION: Both surfaces of an Al foil 6 are coated with the paste-like active material 7, which is mainly composed of Li-Co compound oxide, and dried, rolled, and cut at 19mm of width to form a positive plate 1 for battery. Both surfaces of a copper foil 8 are coated with the paste 9, which is mainly composed of graphite, and an end of an electrode, which is arranged in the periphery at the time of winding the foil 8 spirally to form an electrode group, is coated with a graphite layer 10 thinner than the paste 9, and dried, rolled, and cut at 20mm of width to form a negative plate 2. The positive plate 1 and the negative plate 2 are wound spirally to form an ellipse around of a winding shaft of 33mm width and 0.4mm thickness through a separator 3 made of propylene fine porous film at 22mm of width to obtain an electrode group 4. The electrode group 4 is inserted to a battery case, which is made of Ni plated steel and which has inner dimension at $7 \times 21.5 \times 45.5 \text{ mm}^3$, in the direction of positioning the center line A of the winding shaft at a right angle to an opening B.

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